



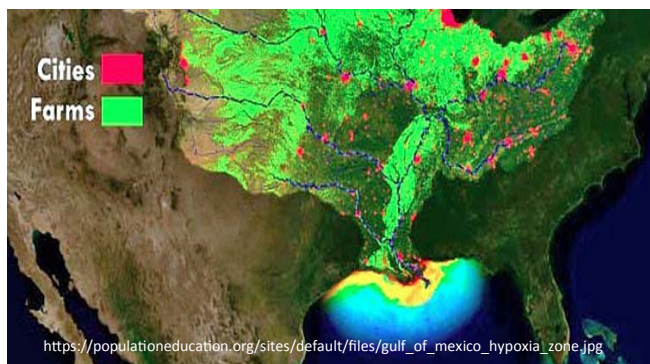
# Water Week in Kentucky

## Natural Solutions for Gulf Hypoxia

March 2018

### What is the Dead Zone?

The Gulf of Mexico Dead Zone is an area of hypoxic or low-oxygen water that is located in the northern part of the Gulf, off the coast of Louisiana and Texas. First documented in 1972, the hypoxic zone occurs when the concentration of dissolved oxygen in the water column decreases to a level (less than 2-3 ppm) that can no longer support aquatic organisms. This can cause major damage to coastal fisheries as fish, crabs and shellfish die or leave the area due to lack of oxygen.



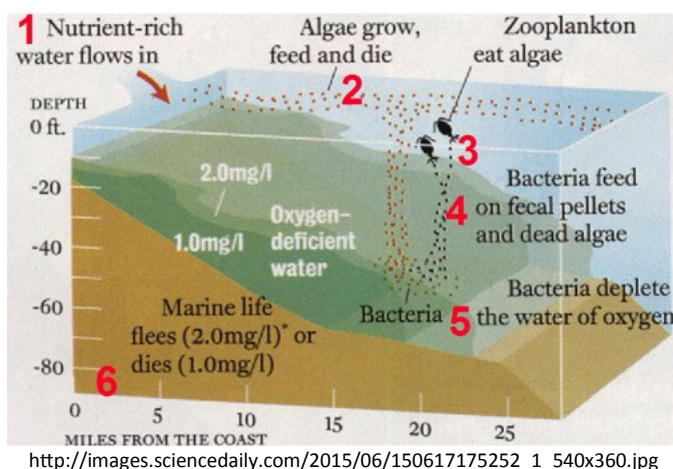
### What causes the Dead Zone?

The drop in oxygen that creates the Dead Zone is caused by large amounts of nutrients (phosphorus and nitrogen) that cause algal growth in coastal waters. The algae grows out of control, and as it dies off the decomposition process uses up the oxygen in the water.

### Where are all these nutrients coming from?

The nutrients causing the Dead Zone are flowing off the land as [Runoff Pollution](#), into our creeks and rivers that flow all the way to the Gulf of Mexico. Fertilizers high in nitrogen and phosphorous wash off agricultural fields and gardens. Failing water treatment plants and septic systems discharge waste that are high in algae promoting nutrients. Animal

waste from pets and livestock can also wash off the land and into the water. Soil erosion and atmospheric deposition are also sources.



### Using nature to help reduce the Dead Zone

Preventing nutrients from getting into our streams in KY can make a huge impact on the size of the Dead Zone in the Gulf! By restoring and utilizing natural processes, being careful about how we use fertilizers, and maintaining our water systems, we can reduce the algae growing chemicals before they can cause a problem:

- *Simply use less fertilizer, and when it is needed follow the instructions on the bottle.*
- *Leave grass clippings on the lawn or start a compost pile. When clippings wash into streams they release nutrients as they break down.*
- *Maintain your septic systems and fix leaks.*
- *Create no-mow zones along streams. Plants along streams filter runoff and remove nutrients before they reach the stream.*

Learn more at <https://www.epa.gov/ms-htf/hypoxia-101> and [https://toxics.usgs.gov/hypoxia/hypoxic\\_zone.html](https://toxics.usgs.gov/hypoxia/hypoxic_zone.html) and <https://gulfhypoxia.net/about-hypoxia/>